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Healthcare Reforms in Cyprus 2013-2017: Does the crisis mark the end of the healthcare sector as we know it?

Health Reform Monitor Section

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Highlights

- Changes in the healthcare sector were introduced as part of a bailout agreement
- These included budget cuts, copayments, clinical guidelines and revision of beneficiary criteria
- Co-payments delivered conflicting results and their framework should be reassessed
- Further reforms are needed, and Cyprus must implement universal health coverage

SUMMARY

As part of a bailout agreement with the International Monetary Fund, the European Commission and the European Central Bank (known as the Troika), Cyprus had to achieve a fiscal surplus through budget constraints and efficiency enhancement. As a result, a number of policy changes were implemented, including a reform of the healthcare sector, and major healthcare reforms are planned for the upcoming years, mainly via the introduction of a National Health System. This paper presents the healthcare sector, provides an overview of recent reforms, assesses the recently implemented policies and proposes further interventions. Recent reforms targeting the demand and supply side included the introduction of clinical guidelines, user charges, introduction of coding for Diagnosis Related Groups (DRGs) and the revision of public healthcare coverage criteria. The latter led to a reduction in the number of people with public healthcare coverage in a time of financial crises, when this is needed the most, while co-payments must be reassessed to avoid creating barriers to access. However, DRGs and clinical guidelines can help improve performance and efficiency. The changes so far are yet to mark the end of the healthcare sector as we know it. A universal public healthcare system must remain a priority and must be introduced swiftly to address important existing coverage gaps.

Background

Cyprus is yet to introduce a universal health coverage system (UHC), and it currently features two fragmented and uncoordinated health sectors: A highly regulated public and an unregulated, for-profit private sector [1-2]. The public sector is funded by the Ministry of Health, and the legal basis for attaining a public beneficiary status is Cypriot or EU citizenship, and satisfying one of several socioeconomic or employment status criteria. Public servants are entitled to free public healthcare regardless of income, which provides an indication of the uneven access to free public healthcare [1-3]. People who do not meet these criteria must pay out-of-pocket to finance their health needs at the public or private sector. The aforementioned issues mean that out-of-pocket (OOP) payments are the primary source of healthcare funding (57%), which exceeds public funding (43%) [2-3]. Cyprus' total health expenditure (THE) as a

percentage of gross domestic product (GDP) is 7.4%, which is among the lowest in Europe [4].

The fragmentation of the health sector impeded the introduction of supply- and demand-side measures, such as co-payments, integrated clinical guidelines, prescribing behaviour monitoring, medical audit and price regulation of medical activities in the private sector. Moreover, the conundrum of public and private sectors escalated to an inefficient allocation of resources, such as the duplication of health infrastructure and lack of some specialties such as general practitioners [5].

A much anticipated, approved by law National Health System (NHS) has not been enacted, something that has been attributed to a number of factors related to politics and concerns regarding its long-term viability [1]. This long-standing anticipation led to stagnation of further efficiency improvement initiatives such as the introduction of electronic patient records and Health Technology Assessment (HTA) program. In particular, low spending on universal prevention programs and public health policies constitute major barriers to efficiency gains [5].

A major drawback of the current system is the impaired capacity to gather and analyse data. Having access to reliable health indicators is important in any macroeconomic environment, but its importance is magnified during financial recessions, since crises have significant effects on health[6]. In this context, the scope of this paper is to present the recently-implemented changes, assess the reforms and propose future interventions which will increase efficiency. A paper by Cylus et al [3] provided an excellent approach, analysing the implementation of the health insurance scheme. We build on this to discuss

the new measures that have been introduced since its publication, due to the Memorandum of Understanding (MoU)[7]. A recent study by Petrou and Vandoros [8] discussed recent reforms, but focused exclusively on pharmaceuticals. This paper follows up on these previous studies [3,8,], while it discusses the interaction between health, financial crises and mandatory reforms.

Policy Reforms

In early 2013, the MoU with the Troika came into effect, which mandated several reforms in healthcare [7].

One of the first measures in 2013 was the introduction of an annual fee for all beneficiaries in order to strengthen the sustainability of the funding structure. This was combined with the requirement to update and align the prices of the public health sector with actual costs incurred to the system, and to revise the criteria for public beneficiary status. Moreover, as a tool to address tax-evasion (one of the contributing factors to the financial crisis), the public beneficiary status is subject to a person's social insurance contributions. However, this led to the exclusion of several patients' categories from free public health care. Such categories include new entrants in the labour market and asylum seekers, since obtaining beneficiary status requires a minimum of three years' consecutive contribution to the social insurance fund. The Troika also mandated wage cuts and a freeze in recruitment in order to constrain public expenditure, which were at first implemented in 2012, prior to the MoU [9]. However, income reduction and unemployment (as a result of the crisis),

sparked a gradual shift of patients towards public healthcare services [10], which peaked in 2011-2012 for inpatient care, demonstrating a 13.5% increase versus the previous year [11-12]. Additional workload and reduced resources impaired the functional capacity of the public health care sector [1]. Consequently, many patients have to choose between long waiting lists in the free public sector [13-14], or paying out-of-pocket for instant access to the private sector. Relatively high out-of-pocket payments, in the context of the financial crisis, emerged as a barrier to indicated medical care for a 28% of the population, second only to Greece[10]. In 2013, there was an increase in the number of patients who were reimbursed by the MoH for treatment in the private sector by 21.7%, due to excessive waiting times. On an individual basis, patients may be referred- and reimbursed by the MoH- to the private sector if the public sector cannot provide timely care and/or if the condition does not fall within the competencies of public sector. This practice was criticized as being financially damaging [15]. A downward trend was noticeable by 2015, indicating efficient monitoring [16].

Regarding rational and efficient prescribing, the value of clinical guidelines in providing summarized guidance to physicians [17] had previously been ignored in Cyprus. The presence of an ageing population, which shifts the pattern of health delivery from acute care to chronic disease management, further augments the importance of integrated, chronic-patient oriented, guidelines[9,18]. This resulted in the preparation of 20 clinical guidelines for an array of health conditions in 2013. A recent survey on these demonstrated high

satisfaction rates among physicians [19]. In addition, clinical algorithms aiming to regulate laboratory ordering were elaborated for nine high volume and per-unit cost laboratory tests.

Traditionally, governments in Cyprus, lulled in a false sense of fiscal security due to above-EU average economic growth, avoided demand-side measures. An increase in demand, without corresponding improvement in health outcomes is associated with an increase in health expenditure as well as waste, and may expose patients to unnecessary and potentially harmful interventions. Prior to the crisis, the lack of demand-side measures was prominent in all layers of the public health care sector, especially pharmaceuticals, emergency care and laboratory test ordering, [7], while inefficient practices were previously not changed, due to lack of clinical guidelines and HTA program.

A co-payment, in the form of a fixed uncapped amount was recently introduced in 2013 (three and six euros for family doctors and specialists, respectively). Results differed depending on the setting: the co-payment reduced visits to primary care physicians, but mental health visits proved inelastic [20-21]. In the laboratory sector, a co-payment in the form of 0.5 euros per test - capped at 10 euros per visit - was introduced, after which, paradoxically, there was an increase in the number of tests prescribed per patient in the emergency services [22]. As a lack of demand-side measures had led to emergency services overuse [3], a 10-euro fixed co-payment fee was introduced for all emergency room visits, which led to a significant reduction of (primarily non-emergent) visits [23], thus relieving an often unnecessary burden which is expected to facilitate faster provision of health care when needed the most.

Despite the reduction in the number of people covered by public healthcare, the Troika also prioritised the introduction of the NHS, which will reduce the currently high out-of-pocket payments and safeguard access to healthcare for the whole population. Towards this direction, the tender for the electronic IT system, which is necessary for an NHS to function effectively and efficiently(and another Troika request) was awarded in late March 2017, showing that there are steps taken in this direction.

In the hospital sector, Cyprus is also working on the replacement of the per-diem reimbursement scheme with DRGs, which can increase hospital efficiency [24-25]. This sector merits additional attention as hospital care accounts for the largest proportion of total health expenditure in Cyprus [3-4]. In line with striking differences between the public and private sectors, the product mix composition of these sectors varies significantly: the private sector features a large number of relatively small hospitals (16 hospitals, plus 21 polyclinics and 39 clinics totalling 1455 beds), in contrast to only nine public hospitals with 1435 beds. Currently, public hospital management teams follow rather administrative tasks and can only marginally influence the centralised resource allocation and decision-making process. The MoH announced law amendments to promote competition between private and public hospitals in the context of the NHS, which provides restructuring and public hospital autonomy, so that they can operate as independent entities on a decentralised level. Ultimately, this aims to minimise politically motivated resource allocation and interventions, which impair their productive efficiency[7-26].

The cumulative impact of the reforms and the austerity measures led to a decline in health expenditure per capita, and as a result, health expenditure per

capita ranked among the lowest in Europe in 2014 (2,266 PPP$ per capita) demonstrating a 2.5% annual average reduction rate, from 2009 onwards [4]. [FIGURE 1]

Future Challenges and responses

There is still great potential to further minimise waste while improving quality of and access to healthcare through further dissemination and optimisation of clinical guidelines. In this context, all ad hoc clinical guidelines committees much be institutionalised on a permanent basis with specific terms of reference, including revisions, updates and educational activities, towards encouraging rational prescribing [27]. It is also imperative to create a medical audit and performance management plan to assess compliance to the clinical guidelines. This will increase transparency and reduce information asymmetry in decision making, while promoting efficiency in a period of reduced resources, thus improving quality of care [28]. From an organisational point of view, the government must promote meritocracy in order to overcome chronic inertias[1].

The hospital sector merits more attention. It has been argued that small hospital size, as is the case in the majority of private sector hospitals, might impede efficiency enhancement[28], while several authors have contested the assumption that private hospitals are more efficient than public ones[29-32]. The ambitious conversion of public hospitals into semi-autonomous and self-financed entities might not necessarily lead to significant efficiency gains, especially given the introduction of a DRG remuneration scheme [33]. Therefore, it is vital to safeguard access of costlier patients to appropriate care [34], since experiences from other countries underline the risk of channeling healthier

patients to the private sector and leaving public hospitals to deal with costlier and riskier patients [35-36]. It is also worth noting that public hospitals currently provide health care for severe cases, which are not always offered in the private sector and private hospitals might not be able to bridge this gap immediately.

As Cyprus just exited the MoU, it is expected that temporary wage cuts will be reversed. This will increase fiscal pressure on the public sector and most importantly on public hospitals which are scheduled to become autonomous within five years after the law is enacted. If, however, wage cuts become permanent, sustaining staff resilience will be challenging, especially given the massive health market restructure and its scheduled unification.

The introduction of the much-needed and long-anticipated NHS faces significant challenges. The consolidation of the heterogenic for-profit private and the highly bureaucratic public sectors, may create an administrative barrier. The lack of proper planning raises concerns on whether the number of GPs, whose number has decreased, is sufficient to comprise a strong primary health care sector which will act as a gatekeeper[5]. A multi-payer health system option has been put forward. However, the small size of the market and the degree of competitive forces requires further investigation regarding the feasibility of such a payer type. Moreover, given that the current system has led to uneven access to healthcare [1], findings from other countries suggest that this phenomenon might be exacerbated [37-39]. As a response, Cyprus should swiftly introduce the designed universal coverage single payer health system.

Conclusion

There are certain elements of positive contribution towards achieving an efficient and sustainable health sector in some of the recently-implemented changes. However, challenges remain. Co-payments might have reduced waste in some areas, but certain adjustments such as exemptions and caps, based on socio-economic criteria or chronic diseases should be introduced, to avoid any barriers to access for vulnerable groups, patients with chronic diseases or those who face affordability issues. Especially during recessions, user charges may cause problems [40-41], so improving efficiency should be done without jeopardising access to treatment to those who need it.

Importantly, the recently revised public healthcare eligibility criteria reduced the number of people covered by public health sector, which is in the opposite direction of the universal health coverage that Cyprus aims to implement. This has removed a safety net for these individuals in a time of financial hardship, which is when they need it the most. The public sector's overload and reduced number of staff has limited access further, thus leaving these patients with out-of-pocket payments as the only option.

The government must continue unabated the reforms that will create the pillars of a much needed and long overdue NHS, meaning that it is important not to abolish the long term strategic planning in favour of any short-term, and short-sighted, opportunistic gains. Further changes should focus on performance management and medical audit and provide clinical guidance. All aforementioned issues require transparency, accountability and meritocracy, free from any political interference.

The crisis led to reforms that in some cases increased efficiency while in others they provided some sort of barriers to care, but more time is needed to get a full picture of their effects and consequences. In any case, these changes have yet to mark the end of the healthcare sector as we know it. This will only be completed once universal coverage under a single payer is finally implemented, facilitating access to care for everyone.

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REFERENCES

1. Petrou P. Financial Crisis as a reform mediator in Cyprus' health Services. Eurohealth incorating Euroobserver 2014; 20:35-3
2. Cylus J., Papanicolas I, Constantinou E., Thedorou M Moving forward: Lessons for Cyprus as it implements its health insurance scheme Health Policy April 2013Volume 110, Issue 1, Pages 1–5
3. Health expenditure, public (% of total health expenditure)http://data.worldbank.org/indicator/SH.XPD.PCAP
4. Health at a Glance: Europe 2014, OECD
5. 2017 European Semester: Assessment of progress on structural reforms, prevention and correction of macroeconomic imbalances, and results of in-depth reviews under Regulation (EU) No 1176/2011. Brussels, 2017
6. Vandoros S, Hessel P, Leone T, Avendano M, Have health trends worsened in Greece as a result of the financial crisis? A quasi-experimental approach European Journal of Public Health, Vol. 23, No. 5, 727–731
7. Memorandum of understanding on specific economic conditionality , Republic of Cyprus, Nicosia, 2013
8. Petrou P Vandoros Sotiris Cyprus in crisis: Recent changes in the pharmaceutical market and options for further reforms without sacrificing access to or quality of treatment Health Policy 119 (2015) 563–568
9. Correia, T; Dussault, G; Pontes, C. The impact of the financial crisis on human resources for health policies in three southern-Europe countries, Health Policy, 119(12), 2015: 1600-1605
10. Eurofound (2013) *Impacts of the crisis on access to healthcare services in the EU*, Dublin
11. Annual report from Cyprus Statistical services. Cystat 2012, Nicosia, Cyprus
12. Annual report, Nicosia General Hospital 2012
13. Theodorou M, Charalambous C, Petrou C, Cylus J. Cyprus: Health system review. Health Systems in Transition. 2012; 14(6):1–128
14. Kiliari N, Theodosopoulou E and Papanastasiou E Multimorbidity and unmet citizens' needs and expectations urge for reforms in the health system of Cyprus: a questionnaire survey *Journal of the Royal Society of Medicine Open*; 5(1) 1–11
15. Nicosia, Annual Report of General Audit 2013, Republic of Cyprus
16. Nicosia, Annual Report of General Audit, 2015, Republic of Cyprus
17. Woolf S.H, Grol R, Hutchinson A, Eccles M, Grimshaw Potential benefits, limitations, and harms of clinical Guidelines BMJ VOLUME 318 20 FEBRUARY 1999
18. Mathers CD, Loncar D (2006) Projections of global mortality and burden of disease from 2002 to 2030. PLoS Med 3(11): e442. doi:10. 1371/journal.pmed.0030442
19. Panayides N, Petrou P, Zinieri B, Giannakou A, Ahniotou G Attitudes Adherence and Barriers Among Puplicly Employed GPS Towards

Evidence Based Medicine and Clinical Practice Guidelines in Cyprus PHS183 VALUE IN HEALTH 19 (2 0 1 6) A347– A766
20. Petrou P. Financial crisis hangover in Cyprus: tracking the demand for utilization of mental health services public health 142 (2017) 4-6
21. Petrou P The Ariadne's thread in co-payment, primary health care usage and financial crisis: findings from Cyprus public health care sector Public Health 129 (2015) 1503-1509
22. Petrou P. FAILED ATTEMPTS TO REDUCE INAPPROPRIATE LABORATORY UTILIZATION IN AN EMERGENCY DEPARTMENT SETTING IN CYPRUS: LESSONS LEARNED The Journal of Emergency Medicine, Vol. 50, No. 3, pp. 510–517, 2016
23. Petrou P. An Interrupted Time-series analysis to Assess impact of Introduction of Co-payment on Emergency Room Visits in Cyprus . Appl Health Econ Health Policy. DOI 10.1007/s40258-015-0169-2
24. Louis DZ, Yuen EJ, Braga M, Cicchetti A, Rabinowitz C, Laine C, Gonnella JSImpact of a DRG-based hospital financing system on quality and outcomes of care in Italy. Health Serv Res. 1999 Apr;34(1 Pt 2):405-15.
25. Schreyögg, J, Tiemann O, and Busse R (2006): Cost accounting to determine prices: how well do prices reflect costs in the German DRG-system?, *Health Care Management Science*, 9 (3): 269-279.
26. Shleifer, A and. Vishny R. W. (1994): Politicians and Firms, *The Quarterly Journal of Economics*, 109 (4): 995-1025.
27. Berwick DM, James B, Coye MJ. Connections between quality measurement and improvement. Medical Care 2003;41:I-30–8.
28. Tiemann O., Schreyögg, J. Effects of Ownership on Hospital Efficiency in Germany Business Research Vol 2.Issue 2 December 2009, 115-145
29. Helmig B and Lapsley I. On the efficiency of public, welfare and private hospitals in Germany over time: a sectoral data envelopment analysis study. Health Services Management Research, 2001, 14:263-274.
30. Herr, A (2008): Cost and technical efficiency of German hospitals: does ownership matter?, Health Economics, 17 (9):1057-1071.
31. Hollingsworth, B (2003): Non-parametric and parametric applications measuring efficiency in health care, Health CareManagement Science, 6 (4): 203-218
32. Tiemann O, Schreyögg J, Busse R. Hospital ownership and efficiency: a review of studies with particular focus on Germany. Health Policy. 2012 Feb;104(2):163-71. doi: 10.1016/j.healthpol.2011.11.010. Epub 2011 Dec 15.
33. Tiemann O, Schreyögg J. Changes in hospital efficiency after privatization. Health Care Manag Sci. 2012 Dec;15(4):310-26.
34. Meltzer, D., Chung, J. & Basu, A. (2002) Does Competition Under Medicare Prospective Payment Selectively Reduce Expenditures on High-Cost Patients? Rand Journal of Economics, 33, 447-468.
35. Barro, J.R., Huckman, R.S. & Kessler, D.P. (2006) The effects of cardiac specialty hospitals on the cost and quality of medical care. J Health Econ, 25, 702-21.
36. Chard, j., Kuczawski, m., Black, n. & Van der Meulen, j. (2011) Outcomes of elective surgery undertaken in independent sector treatment centres and

NHS providers in England: audit of patient outcomes in surgery. BMJ, 343, d6404.
37. Mason, A., Miraldo, M., Siciliani, L., Sivey, P. & Street, A. (2008) Establishing a Fair Playing Field for Payment by Results. York, Centre for Health Economics, University of York.
38. LungenM, StollenwerkB , Messne P, Lauterbach K W and Gerber A, Waiting times for elective treatments according to insurance status: A randomized empirical study in Germany *International Journal for Equity in Health* 2008, 7:1
39. Kuchinke BA, Sauerland D, Wubker A The influence of insurance status on waiting times in German acute care hospitals :an empirical analysis of new data Int J Equity Health 2009 Dec 21;8:44
40. Philipa Mladovsky, Divya Srivastava, Jonathan Cylus, Marina Karanikolos, Tamás Evetovits, Sarah Thomson and Martin McKee HEALTH POLICY IN THE FINANCIAL CRISIS – Eurohealth incorporating Euro Observer — Vol.18 | No.1 | 2012 , 3-6.
41. Correia, T, et al. Listening to doctors on patients' use of healthcare during the crisis: uncovering a different picture and drawing lessons from Portugal. J Public Health, 2017; 39 (2): e56-e62

Table 1

Policy	Year				
	2012	**2013**	**2014**	**2015**	**2016-2017**
Budgetary Framework-Fiscal Policy Public and Private sector	• Introduction of temporary contribution to all employees of both public, broader public and private sector (0-3.5%) • A permanent contribution of 3% on pensionable earnings of state employees to the Public Employees' Pension Plan • Freeze of recruitment, increments and general wage increase in public and broader public sector until 31 December 2016. • Suspension of COLA for public and broader public sector until the end of the first quarter of 2016 • Reduction in MOH's budget -3.5% vs last year	• Introduction of 1.5 % annual fee to all beneficiaries of public health care sector • Scaled reduction in emoluments of public and broader public sector pensioners and employees • Reduction in MOH's budget -2.7% vs last year	• Further reduction of 3% on all wages of public and broader public sector employees and pensioners • Reduction in MOH's budget -10.9% vs last year	• Reduction in MOH's budget -2.6% vs last year	
Performance Public and private sector	• Preparation for the introduction of DRG reimbursement system			•	• Award for the tender of the IT system of the NHS

Supply Side Public sector		• Introduction of laboratory ordering algorithms Cost-effectiveness analysis • Introduction of Health technology assessment program • Introduction of clinical guidelines			
Demand Side Public sector		• Introduction of co-payment in emergency room visits • Introduction of co-payment in laboratory ordering • Introduction of co-payment in pharmaceuticals • Introduction of co-payment for consultation			
Eligibility criteria Public sector		• Revision of income thresholds for free public health care			

Table 2

BENEFICIARY CATEGORIES	BENEFITS	INCOME CRITERIA	Fees	Other criteria for eligibility
Category A	**Before Crisis**	15,377 euros per person	0% Personal Contribution	Families with 3 and more children Public servants and Officials (elected and appointed) students, social benefit receivers, children under the supervision of welfare services, residents in military exclusion zones, students at the school for the blind and the school for the deaf etc
	After Crisis	15,400 euros per person	1.5% of their annual income-Free access at point of care	Families with 3 and more children Public servant and Officials (elected and appointed) social benefit receivers, war casualties, children under the supervision of welfare services, residents in military exclusion zones, students at the school for the blind and the school for the deaf etc
Category B	**Before Crisis**	Income between 15,377 20,503 euros per person	50% Personal contribution	
	After Crisis	**ABOLISHED**		
Chronic Patients	**Before Crisis**	None	0% Personal Contribution **for treatment of specific condition only**	Diabetes, Cancer, Rheumatoid arthritis, lupus erythematosous, Parkinson, epilepsy, HBV, HCV, Bowel inflammable diseases, psychiatric conditions, progressing renal failure
	After Crisis	Income criteria were set to 150,000 euros per annum	0% Personal Contribution **for treatment of specific condition only**	Diabetes, Cancer, Rheumatoid arthritis, lupus erythematosous, Parkinson, epilepsy, HBV, HCV, Bowel inflammable diseases, psychiatric conditions, progressing renal failure, Psoriasis, Attention-deficit/hyperactivity disorder
Chronic Patients with severe conditions	**Before Crisis**	None	0% Personal Contribution	I. Dementia II. Dialysis patients III. Human immunodeficiency virus IV. Transplanted V. Hemophilic patients VI. Polycythemia vera VII. Immune Thrombocytopenic Purpura VIII. Congenital heart diseases IX. Paraplegic, quadriplegic X. Myasthenia gravis XI. Multiple sclerosis, XII. Growth hormone deficiency XIII. Cystic fibrosis XIV. Type 1 Diabetes melitus for minors XV. Autism XVI. Minor with body deformities XVII. Patients with thalassemia or drepanocytic anemia
	After Crisis	For the following conditions, income criteria were introduced (150,000 euros per annum) I. Multiple sclerosis II. Myasthenia gravis III. Dementia IV. Human immunodeficiency virus V. Myelodysplastic s yndromes VI. Drepanocytic anemia VII. Myeloproliferative disorder VIII. Congenital heart diseases	0% Personal Contribution	For the following conditions no income criteria apply I. Dialysis patients II. Transplanted XIV. Hemophilic patients, patients with immune Thrombocytopenic Purpura and other bleeding disorders III. Family Mediterranean fever IV. Paraplegic, quadriplegic V. Thalassemia patients

		IX. Growth hormone deficiency X. Cystic fibrosis XI. Type 1 Diabetes mellitus for minors XII. Autism XIII. Individuals with body deformities		